

# Konstantin E Starkov

## List of Publications by Year in descending order

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65  
papers

724  
citations

516710

16  
h-index

610901

24  
g-index

66  
all docs

66  
docs citations

66  
times ranked

253  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Localization of compact invariant sets of the Lorenz system. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 353, 383-388.  | 2.1 | 105       |
| 2  | Global dynamics of the Kirschner-Panetta model for the tumor immunotherapy. Nonlinear Analysis: Real World Applications, 2013, 14, 1425-1433.  | 1.7 | 38        |
| 3  | On the global dynamics of one cancer tumour growth model. Communications in Nonlinear Science and Numerical Simulation, 2014, 19, 1486-1495.   | 3.3 | 37        |
| 4  | LOCALIZATION OF COMPACT INVARIANT SETS OF NONLINEAR SYSTEMS WITH APPLICATIONS TO THE LANFORD SYSTEM. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2006, 16, 3249-3256.      | 1.7 | 32        |
| 5  | Bounding a domain containing all compact invariant sets of the permanent-magnet motor system. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 3879-3888.                                   | 3.3 | 29        |
| 6  | LOCALIZATION OF COMPACT INVARIANT SETS OF NONLINEAR TIME-VARYING SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2008, 18, 1599-1604.                                 | 1.7 | 28        |
| 7  | On the global dynamics of a chronic myelogenous leukemia model. Communications in Nonlinear Science and Numerical Simulation, 2016, 33, 174-183.   | 3.3 | 27        |
| 8  | Global stability and tumor clearance conditions for a cancer chemotherapy system. Communications in Nonlinear Science and Numerical Simulation, 2016, 40, 206-215.   | 3.3 | 26        |
| 9  | Compact invariant sets of the Bianchi VIII and Bianchi IX Hamiltonian systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 3184-3187.  | 2.1 | 21        |
| 10 | ON THE GLOBAL DYNAMICS OF THE OWEN-SHERRATT MODEL DESCRIBING THE TUMOR-MACROPHAGE INTERACTIONS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2013, 23, 1350020.             | 1.7 | 21        |
| 11 | Estimation of the domain containing all compact invariant sets of a system modelling the amplitude of a plasma instability. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 367, 65-72. | 2.1 | 20        |
| 12 | The dimension formula for the Lorenz attractor. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 1179-1182.   | 2.1 | 20        |
| 13 | ESTIMATION OF THE DOMAIN CONTAINING ALL COMPACT INVARIANT SETS OF THE OPTICALLY INJECTED LASER SYSTEM. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 4213-4217.    | 1.7 | 19        |
| 14 | On synchronization of chaotic systems based on the Thau observer design. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 17-25.  | 3.3 | 19        |
| 15 | Localization of compact invariant sets and global stability in analysis of one tumor growth model. Mathematical Methods in the Applied Sciences, 2014, 37, 2854-2863.  | 2.3 | 18        |
| 16 | Dynamical properties and tumor clearance conditions for a nine-dimensional model of bladder cancer immunotherapy. Mathematical Biosciences and Engineering, 2016, 13, 1059-1075.                                   | 1.9 | 17        |
| 17 | Compact invariant sets of the static spherically symmetric Einstein-Yang-Mills equations. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 374, 1728-1731.                               | 2.1 | 16        |
| 18 | Localization of periodic orbits of polynomial vector fields of even degree by linear functions. Chaos, Solitons and Fractals, 2005, 25, 621-627.   | 5.1 | 14        |

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|----|---|-----|-----------|
| 19 | Ultimate dynamics of the Kirschner-Panetta model: Tumor eradication and related problems. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2017, 381, 3409-3416.                            | 2.1 | 14        |
| 20 | Localization of periodic orbits of polynomial systems by ellipsoidal estimates. <i>Chaos, Solitons and Fractals</i> , 2005, 23, 981-988.  | 5.1 | 13        |
| 21 | Modeling cancer evolution: evolutionary escape under immune system control. <i>Journal of Physics: Conference Series</i> , 2017, 811, 012004.   | 0.4 | 12        |
| 22 | Localization of periodic orbits of polynomial systems by ellipsoidal estimates. <i>Chaos, Solitons and Fractals</i> , 2005, 23, 981-988.  | 5.1 | 11        |
| 23 | Bounds for compact invariant sets of the system describing dynamics of the nuclear spin generator. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2009, 14, 2565-2570.                           | 3.3 | 11        |
| 24 | On dynamic tumor eradication conditions under combined chemical/anti-angiogenic therapies. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2018, 382, 387-393.                             | 2.1 | 11        |
| 25 | Universal localizing bounds for compact invariant sets of natural polynomial Hamiltonian systems. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2008, 372, 6269-6272.                    | 2.1 | 9         |
| 26 | Dynamical Analysis of Raychaudhuri Equations Based on the Localization Method of Compact Invariant Sets. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2014, 24, 1450136. | 1.7 | 9         |
| 27 | Chaotification of polynomial continuous-time systems and rational normal forms. <i>Chaos, Solitons and Fractals</i> , 2004, 22, 849-856.  | 5.1 | 8         |
| 28 | On Some Dynamical Properties of a Seven-Dimensional Cancer Model with Immunotherapy. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2014, 24, 1450020.                     | 1.7 | 8         |
| 29 | Localization of periodic orbits of the Rössler system under variation of its parameters. <i>Chaos, Solitons and Fractals</i> , 2007, 33, 1445-1449.   | 5.1 | 7         |
| 30 | Bounds for a domain containing all compact invariant sets of the system describing the laser-plasma interaction. <i>Chaos, Solitons and Fractals</i> , 2009, 39, 1671-1676.   | 5.1 | 7         |
| 31 | Erratum to "The dimension formula for the Lorenz attractor" [ <i>Phys. Lett. A</i> 375 (8) (2011) 1179]. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2012, 376, 3472-3474.             | 2.1 | 7         |
| 32 | On the Ultimate Dynamics of the Four-Dimensional Rössler System. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2014, 24, 1450149.   | 1.7 | 7         |
| 33 | Unbounded dynamics and compact invariant sets of one Hamiltonian system defined by the minimally coupled field. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2015, 379, 1012-1016.      | 2.1 | 7         |
| 34 | BOUNDING A DOMAIN THAT CONTAINS ALL COMPACT INVARIANT SETS OF THE BLOCH SYSTEM. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2009, 19, 1037-1042.                        | 1.7 | 6         |
| 35 | Localization analysis of compact invariant sets of multi-dimensional nonlinear systems and symmetrical prolongations. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2010, 15, 1159-1165.        | 3.3 | 6         |
| 36 | Observability of smooth control systems. <i>Journal of Mathematical Sciences</i> , 1996, 78, 433-496.   | 0.4 | 5         |

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|----|---|-----|-----------|
| 37 | Dynamic Analysis of the Melanoma Model: From Cancer Persistence to Its Eradication. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2017, 27, 1750151.  | 1.7 | 5         |
| 38 | A Cancer Model for the Angiogenic Switch and Immunotherapy: Tumor Eradication in Analysis of Ultimate Dynamics. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2020, 30, 2050150.                          | 1.7 | 5         |
| 39 | Observability conditions of linear time-varying systems and its computational complexity aspects. Mathematical Problems in Engineering, 2002, 8, 439-449.   | 1.1 | 4         |
| 40 | Localization of periodic orbits of autonomous systems based on high-order extremum conditions. Mathematical Problems in Engineering, 2004, 2004, 277-290.   | 1.1 | 4         |
| 41 | Eradication Conditions of Infected Cell Populations in the 7-Order HIV Model with Viral Mutations and Related Results. Mathematics, 2021, 9, 1862.  | 2.2 | 4         |
| 42 | Ultimate dynamics and optimal control of a multi-compartment model of tumor resistance to chemotherapy. Discrete and Continuous Dynamical Systems - Series B, 2019, 24, 2017-2038.  | 0.9 | 4         |
| 43 | Dynamics of the tumor-immune-virus interactions: Convergence conditions to tumor-only or tumor-free equilibrium points. Mathematical Biosciences and Engineering, 2019, 16, 421-437.  | 1.9 | 4         |
| 44 | BOUNDS FOR THE DOMAIN CONTAINING ALL COMPACT INVARIANT SETS OF THE SYSTEM MODELING DYNAMICS OF ACOUSTIC GRAVITY WAVES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2009, 19, 3425-3432.                 | 1.7 | 3         |
| 45 | On bounded and unbounded dynamics of the Hamiltonian system for unified scalar field cosmology. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 2064-2068.  | 2.1 | 3         |
| 46 | Convergence dynamics in one eco-epidemiological model: Self-healing and some related results. Communications in Nonlinear Science and Numerical Simulation, 2020, 85, 105223.   | 3.3 | 3         |
| 47 | The four-dimensional Kirschner-Panetta type cancer model: How to obtain tumor eradication?. Mathematical Biosciences and Engineering, 2018, 15, 1243-1254.  | 1.9 | 3         |
| 48 | Number characteristics of observability for nonlinear continuous-time control systems. IMA Journal of Mathematical Control and Information, 2000, 17, 425-437.  | 1.7 | 2         |
| 49 | Output maps with associated asymptotically stable zero dynamics. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 1195-1200.  | 0.4 | 2         |
| 50 | BOUNDS FOR THE SET CONTAINING ALL COMPACT INVARIANT SETS OF THE LINEARLY COUPLED LASER SYSTEM. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2008, 18, 1211-1217.   | 1.7 | 2         |
| 51 | LOCALIZING BOUNDS FOR COMPACT INVARIANT SETS OF NONLINEAR SYSTEMS POSSESSING FIRST INTEGRALS WITH APPLICATIONS TO HAMILTONIAN SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2010, 20, 1477-1483. | 1.7 | 2         |
| 52 | Periodic orbits and 10 cases of unbounded dynamics for one Hamiltonian system defined by the conformally coupled field. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 1337-1341.                              | 2.1 | 2         |
| 53 | Localization of the attractor of the differential equations for the solar wind-magnetosphere-ionosphere model. Doklady Physics, 2010, 55, 471-473.  | 0.7 | 1         |
| 54 | Stabilization in a 3D eco-epidemiological model: From the complete extinction of a predator population to their self-healing. Mathematical Methods in the Applied Sciences, 2020, 43, 10646-10658.  | 2.3 | 1         |

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|----|---|-----|-----------|
| 55 | Ultimate tumor dynamics and eradication using oncolytic virotherapy. Communications in Nonlinear Science and Numerical Simulation, 2021, 92, 105469.  | 3.3 | 1         |
| 56 | 5D model of pancreatic cancer: Key features of ultimate dynamics. Communications in Nonlinear Science and Numerical Simulation, 2021, 103, 105997.  | 3.3 | 1         |
| 57 | LOCALIZATION OF COMPACT INVARIANT SETS OF THE RIKITAKE SYSTEM AND PIKOVSKY-RABINOVICH-TRAKHTENGERTZ SYSTEM. , 2007, , .   |     | 1         |
| 58 | On the global dynamics of the cancer AIDS-related mathematical model. Kybernetika, 0, , 563-579.  | 0.0 | 1         |
| 59 | Estudio de la dinÁmica global para un modelo de EvasiÁn-Immune de un tumor cancerÁgeno. Computacion Y Sistemas, 2015, 18, .   | 0.3 | 1         |
| 60 | Bounding the domain of some three species food systems*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 193-198.  | 0.4 | 0         |
| 61 | ON A POLYTOPE CONTAINING ALL COMPACT INVARIANT SETS FOR A CLASS OF NATURAL POLYNOMIAL HAMILTONIAN SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2011, 21, 1953-1958. | 1.7 | 0         |
| 62 | Global Dynamics of the Angiogenesis in a Tumor-Immune System Model. , 2015, , .   |     | 0         |
| 63 | Global Dynamics of one Chronic Lymphocytic Leukemia Model. , 2015, , .  |     | 0         |
| 64 | Localization of Compact Invariant Sets of One Plasma Dynamics Model. , 2011, , .  |     | 0         |
| 65 | Nonnegative Solutions of Systems with Fractional-Rational Right-Hand Sides and Localization of Attractors. Differential Equations, 2021, 57, 1434-1440.   | 0.7 | 0         |